UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

PREPARED IN COOPERATION WITH THE
TEMPORARY STATE COMMISSION ON TUG HILL

WATER-RESOURCES INVESTIGATIONS REPORT 86-4040
SHEET 3 OF 3 - WELL YIELDS IN THE UNCONSOLIDATED AQUIFERS

76° 00' 45' 30' 15' 75° 00' 45' 74° 30'

44° 00'

45°

43° 30'

INDEX MAP

WELL YIELDS FROM UNCONSOLIDATED AQUIFERS

This map shows the range of well yields in the surficial aquifers. Well yields are those expected from individual wells that are fully developed; the values indicate potential sustained withdrawals from individual wells as estimated from the transmissivity of the aquifer. About 90 percent of the fully developed wells in each area should have yields within the ranges shown.

Geologic conditions vary somewhat within each well-yield unit; therefore, the yield units were based on the dominant water-yielding rock type. For example, some fine-grained deposits may be found in units shown to consist predominantly of sand and gravel, and thin surficial sand and gravel is found in some areas shown to consist predominantly of till, lake silt, or clay.

The geologic conditions shown in the Adirondack foothills area in the eastern third of the basin are based on limited field reconnaissance and data from a small number of wells.

SELECTED REFERENCES

Waller, R. M., 1976, Surficial geologic map of the Black River basin, New York: U.S. Geological Survey Miscellaneous Field Studies Map MF-728a, 1 sheet.

Waller, R. M., and Ayer, G. R., 1975, Water resources of the Black River basin, New York: New York State Department of Environmental Conservation, BRB-1, 205 p.

EXPLANATION

WELL YIELDS

- <1 TO 10 GALLONS PER MINUTE--Fine to medium lake sand or granular till with low permeability
- 10 TO 50 GALLONS PER MINUTE--Sand and gravel with moderate to high permeability but generally only 1 to 15 feet of saturated thickness
- 25 TO 100 GALLONS PER MINUTE--Sand and gravel with moderate to high permeability in favorable topographic positions for recharge and stream infiltration
- Sand and gravel with moderate to high permeability confined under layers of silt or clay
- AREA BOUNDARY
- BASIN BOUNDARY

0 1 2 3 4 5 6 7 8 9 10 MILES
0 1 2 3 4 5 6 7 8 9 10 KILOMETERS
NATIONAL GEODETIC VERTICAL DATUM OF 1929

Base from U.S. Geological Survey
Topographic maps, 1:62,500 scale

GROUND-WATER AVAILABILITY IN THE BLACK RIVER BASIN, NEW YORK

By
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Hydrogeology by R.M. Waller, 1968